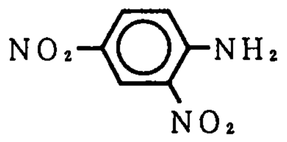
2,4-Dinitroaniline (2,4-ジニトロアニリン)

Chemical Name: 2,4-Dinitroaniline
Synonym 2,4-Dinitrobenzenamine
Benzenamine, 2,4-dinitro-
Molecular weight: 183.1
Melting point: 177-183℃
Boiling point: ℃
Chemical Structure



CAS No: 97-02-9
MITI No: (3)-403
ML No: 4-(12)-212
Source of Substance: Wako Pure Chem. Ind. Ltd.
Lot. No: LAN0415
Purity: %
Vehicle: DMSO

Judgement for
Chromosomal Aberration in CHL: Positive

IARC Evaluation : not yet cited

Experimental Data

	Treated Time (Hr)	Concentration (mg/ml)	No. of Metaphase	Polyploid (%)	Judge	Cell with Structural Chromosome Aberration (%) Gap	CTB	CTE	CSB	CSE	Total -G	Total +G	Judge
DMSO	24		200	0	−	0	0.5	0	0	0	0.5	0.5	−
	48		200	0	−	0	0.5	0.5	0	0	1.0	1.0	−
Test Chemical													
	24	0.0375	200	0	−	1.5	0.5	0	0	0	0.5	2.0	−
		0.075	200	1.0	−	0.5	0.5	1.0	0	0	1.5	2.0	−
		0.15	200	0	−	3.0	1.0	0.5	0	0	1.5	3.5	−
		0.3	98	0	−	1.0	1.0	1.0	0	0	2.0	3.1	−
		0.6				No observation for metaphase							
	48	0.0375	200	1.0	−	0	0	0.5	0	0	0.5	0.5	−
		0.075	200	0.5	−	0.5	0.5	0	0	0	0.5	1.0	−
		0.15				No observation for metaphase							
		0.3				No observation for metaphase							
		0.6				No observation for metaphase							
Positive Control													
(MMC)	24	0.00008	200	0	−	8.5	11.5	41.5	0.5	0	47.5	50.5	+
	48	0.00008	200	1.5	−	10.5	19.0	55.0	0	0	60.0	61.5	+

Experimental Data

	5% S 9 with or without	Concentration (mg/ml)	No. of Metaphase	Polyploid (%)	Judge	Cell with Structural Chromosome Aberration (%) Gap	CTB	CTE	CSB	CSE	Total -G	Total +G	Judge
DMSO	−		200	0.5	−	0	0.5	0.5	0	0	1.0	1.0	−
	+		200	1.0	−	0	0	0	0	0	0	0	−
Test Chemical													
	−	0.2	200	2.5	−	0	0	0.5	0	0	0.5	0.5	−
		0.4	200	0	−	1.0	0.5	1.5	0	0	2.0	3.0	−
		0.8	200	0	−	1.5	1.0	0.5	0	0	1.5	3.0	−
		1.2	200	0	−	2.0	1.0	0.5	0	0	1.5	3.5	−
		1.6	200	0	−	1.5	0.5	1.5	0	0	2.0	3.5	−
	+	0.2	200	0.5	−	0	1.0	3.5	0	0	4.5	4.5	−
		0.4	200	0	−	1.5	2.0	5.5	0	0	7.5	8.0	±
		0.8	200	1.0	−	1.5	1.0	2.0	0	0	3.0	4.5	−
		1.2	200	0	−	1.0	1.5	2.0	0	0	3.5	4.5	−
		1.6	200	0.5	−	2.0	1.0	2.0	0	0	3.0	5.0	±
Positive Control (B(a)P)													
	−	0.016	200	0	−	0	0	0.5	0	0	0.5	0.5	−
	+	0.016	200	0	−	6.5	10.5	34.5	0	0	39.5	40.0	+

Experimental Data

	10% S 9 with or without	Concentration (mg/ml)	No. of Metaphase	Polyploid (%)	Judge	Cell with Structural Chromosome Aberration (%)							
						Gap	CTB	CTE	CSB	CSE	Total -G	Total +G	Judge
DMSO	−		200	0.5	−	0	0	0	0	0	0	0	−
	+		200	0	−	0.5	0	0	0	0	0	0.5	−
Test Chemical													
	−	0.0625	200	1.5	−	0	0	0	0	0	0	0	−
		0.125	200	0.5	−	0	0	0.5	0	0	0.5	0.5	−
		0.25	200	3.0	−	0	0.5	0	0	0	0.5	0.5	−
		0.5	200	2.0	−	0.5	0	1.5	0	0	1.5	2.0	−
		1.0	200	2.0	−	0.5	0	0.5	0	0	0.5	1.0	−
	+	0.0625	200	0.5	−	0.5	0	0	0	0	0	0.5	−
		0.125	200	2.5	−	1.5	0	0.5	0	0	0.5	2.0	−
		0.25	200	0	−	1.5	2.0	9.5	0	0	11.5	11.0	+
		0.5	200	0.5	−	2.0	3.0	15.0	0	0	16.5	17.5	+
		1.0	200	0	−	1.5	0	6.5	0	0	6.5	8.0	±
Positive Control (B(a)P)													
	−	0.016	200	0.5	−	0.5	0	1.0	0	0	1.0	1.5	−
	+	0.016	200	0.5	−	4.5	6.0	25.5	0	0	28.0	29.5	+